

IN THE CLAIMS

1 1. (original) A template to form a recorded pattern on a substrate from a
2 conformable material disposed between said template and said substrate, with said
3 recorded pattern having recorded features with designed dimensions; said template
4 comprising:

5 an original pattern having original features with original dimensions, with said
6 original dimensions differing from said designed dimensions sufficient to compensate
7 for volumetric changes of said conformable material that occurs upon said
8 conformable material transitioning between first and second states.

1 2. (original) The template as recited in claim 1 wherein said first state comprises
2 a liquid state and said second state comprises a solid state.

1 3. (original) The template as recited in claim 1 wherein said original pattern
2 comprises a plurality of protrusions and recessions, with a set of said plurality of
3 protrusions and recessions having angled profiles.

1 4. (original) The template as recited in claim 1 wherein said original pattern is
2 formed on a surface of said template, with said original pattern comprising a plurality
3 of protrusions and recessions, with a set of said plurality of protrusions and recessions
4 having a width that varies in a direction normal to said surface.

1 5. (original) The template as recited in claim 1 wherein said volumetric changes
2 further a volumetric expansion of said conformable material.

1 6. (original) The template as recited in claim 1 wherein said volumetric changes
2 includes a volumetric contraction of said conformable material.

1 7. (original) The template as recited in claim 1 wherein said original pattern
2 comprises a profile selected from the group consisting of recessed and protruded,
3 smooth, and planarized profiles.

1 8. (original) The template as recited in claim 1 wherein said template comprises
2 silicon, silicon dioxide, silicon germanium carbon, gallium nitride, silicon
3 germanium, sapphire, gallium arsenide, epitaxial silicon, polysilicon, gate oxide,
4 quartz, or a combination thereof.

1 9. (original) A template to pattern recorded features on a substrate from a
2 conformable material disposed between said template and said substrate, with said
3 recorded features having designed dimensions; said template comprising:
4 original features having original dimensions, with said original dimensions differing
5 from said designed dimensions sufficient to compensate for volumetric changes of
6 said conformable material that occurs upon said conformable material transitioning
7 between first and second states.

1 10. (original) The template as recited in claim 9 wherein said first state comprises
2 a liquid state and said second state comprises a solid state.

1 11. (original) The template as recited in claim 10 wherein said original features
2 comprises a plurality of protrusions and recessions, with a set of said plurality of
3 protrusions and recessions having angled profiles.

1 12. (original) The template as recited in claim 11 wherein said original features is
2 formed on a surface of said template, with said original features comprising a
3 plurality of protrusions and recessions, with a set of said plurality of protrusions and
4 recessions having a width that varies in a direction normal to said surface.

1 13. (original) The template as recited in claim 12 wherein said volumetric changes
2 includes a volumetric expansion of said conformable material.

1 14. (original) The template as recited in claim 13 wherein said volumetric changes
2 includes a volumetric contraction of said conformable material.

1 15. (original) The template as recited in claim 14 wherein said original features
2 comprises a profile selected from the group consisting of recessed and protruded,
3 smooth, and planarized profiles.

1 16. (original) The template as recited in claim 15 wherein said template comprises
2 silicon, silicon dioxide, silicon germanium carbon, gallium nitride, silicon
3 germanium, sapphire, gallium arsinide, epitaxial silicon, polysilicon, gate oxide,
4 quartz, or a combination thereof.

1 17. (original) A template to form a recorded pattern on a substrate from a
2 conformable material disposed between said template and said substrate, with said
3 recorded pattern having recorded features with designed dimensions; said template
4 comprising:
5 an original pattern having original dimensions, said recorded pattern having first
6 dimensions in a first phase state and second dimensions in a second phase state
7 differing from said first dimensions, with said first dimensions being established to
8 compensate for volumetric changes of said conformable material between said first
9 and second phase states to form said second dimensions, with said second dimensions
10 being substantially the same as said designed dimensions.

1 18. (original) The template as recited in claim 17 wherein said first state
2 comprises a liquid state and said second state comprises a solid state.

1 19. (original) The template as recited in claim 17 wherein said original pattern
2 comprises a plurality of protrusions and recessions, with a set of said plurality of
3 protrusions and recessions having angled profiles.

1 20. (original) The template as recited in claim 17 wherein said original pattern is
2 formed on a surface of said template, with said original pattern comprising a plurality
3 of protrusions and recessions, with a set of said plurality of protrusions and recessions
4 having a width that varies in a direction normal to said surface.